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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,235	07/23/2001	Masahiro Sueyoshi	450100-03356	4777

20999 7590 06/04/2004  
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NEW YORK, NY 10151

EXAMINER

TRUONG, LECHI

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/911,235

Applicant(s)

AAA

Examiner

LeChi Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

1. Claims 1-20 are presented for the examination.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ault et al (US. Patent 5,764,889).

3. As to claim 1, Ault teaches the invention substantially as claimed including : one or more tasks (a task, col 2, ln 46-50/ a specific task, col 5, ln 7-14), an executing environment (a new environment, col 5, ln 10-15), an operating system (operating system kernel, col 6, ln 5-10), the time activating said task (executing a task on behalf of a user with and appropriate security environment, col 2, ln 45-50/ a specific task to perform, col 5, ln 8-10). Ault does not explicit teaches executing mutual verification. However, Ault teaches executing mutual verification (the necessary POSIX permission setting, col 5, ln 27-33/ POSIX functions are invoked to establish the correct supplementary groups, groups ID and user ID, col 4, ln 28-35). It would have been obvious to one of the ordinary skill in the art at time the invention was made to apply the teaching of POSIX because POSIX's POSIX permission setting would establishes the correct process security and execution environment for the new user task program.

4. As to claim 2, Ault teaches a key given (user name/ password, user task, fig. 1, user (user, col 3, ln 55-65/ fig. 1).

5. As to claim 3, Ault teaches a task requesting service of said operating system ( col 5, ln 22-25/ col 6, ln 5-7/ col 2, ln 45-60).

6. Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ault et al (US. Patent 5,764,889) in view of Sparague et al (US. Patent 6,449,720 b1).

7. As to claim 4, Ault teaches first mutual verification (the specified user task in a new address space, col 6, ln 5-8).

8. Ault does not teach a second mutual verification, second mutual verification is performed following said first mutual verification. However, Sparague teaches a second mutual verification (the ROM loader program considers the initial native mode security applet to pre-approved and encrypted with a fixed key, col 8, ln 55-60/ the OPC 21 uses the previously supplied unique S/N 17 to look up the corresponding arbitrarily supplied code key c, col 5, ln 59-67), second mutual verification is performed following said first mutual verification (col 6, ln 1-5).

9. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Ault and Sparague because Sprague's second mutual verification would perform one or more secure functions for running security application.

10. As to claim 5, Ault teaches operating system (operating system kernel may be a POSIX compliant kernel, col 2, ln 53-56), verify a task (the database 134 to determine the user ID and group ID corresponding to user name 114, col 4, ln 30-35/POSIX permission settings, col 5, ln

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22-34), a mutual verification key (user name/ password, user task, fig. 1), operating system to encipher said mutual verification key (setting the user ID of said new address space to the user ID of the user name specified by environment , col 6, ln 25-32).

11. Ault does not teach a stack pointer of said task, return it to said task and decipher said task with said mutual verification key. However, Sparague teaches stack pointer (stack pointer, col 12, ln 23-27), return it to said task (S/N and code Key C is received from OPC to the software developer PC, Fig. 1, col 5., ln 15-37), decipher said task with said mutual verification key (decrypt and execute the registered applet with S/N = 32 A, col 5, ln 59=67 to col 6, ln 1-5).

12. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Ault and Sparague because Sparague's stack pointer, S/N and code Key C is received from OPC to the software developer PC and decrypt and execute the registered applet with S/N = 32 A would provide the security environment in which only pre-approved security applets are granted permission to load and run.

13. As to claim 6, Sparague teaches stack pointer (stack pointer, col 12, ln 23-27), subsequent verification steps (the ROM loader program considers the initial native mode security applet to pre-approved and encrypted with a fixed key, col 8, ln 55-60/ the OPC 21 uses the previously supplied unique S/N 17 to look up the corresponding arbitrarily supplied code key c, col 5, ln 59-67).

14. As to claim 7, it is an apparatus claim of claims 1, 3, 5; therefore, it is rejected for the same reason as claims 1, 3, 5. In additional, Ault teaches success of verification (col 5, ln 26-33).

15. As to claim 8, it is an apparatus claim of claims 5, 6; therefore, it is rejected for the same reasons as claims 5, 6 above.

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16. As to claim 9, it is an apparatus claim of claims 7,8; therefore, it is rejected for the same reasons as claims 7,8.

*Allowable Subject Matter*

17. Claims 10-20 are allowed.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

May 28, 2004

  
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